

AMENDMENT NO. 1 DECEMBER 2023

TO

IS 16362 : 2020 GEOSYNTHETICS — GEOTEXTILES USED IN SUBGRADE STABILIZATION IN PAVEMENT STRUCTURES — SPECIFICATION

(First Revision)

(Page 2, clause 4.2, third sentence) — Substitute the following for third sentence:

‘Polyolefin material shall be made resistant to ultraviolet light by adding 2 to 3 percent carbon black with uniform dispersion and if required a suitable UV stabilizer may be added.’

(Page 3, Table 1) — Substitute the following for existing table:

Table 1 Requirements of Geotextiles for Stabilization Applications

(Clauses 4.3 and 5.4)

Sl No.	Characteristic(s)	Requirements						Method of Test, Ref to
		Class 1		Class 2		Class 3		
		Elongation < 50 percent	Elongation ≥ 50 percent	Elongation < 50 percent	Elongation ≥ 50 percent	Elongation < 50 percent	Elongation ≥ 50 percent	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
A Index Properties:								
i)	Type of geotextile	← Woven/non-woven →		← Woven/non-woven →		← Woven/non-woven →		–
ii)	Roll length, m, <i>Min</i>	← 50 or 100 or as agreed →		← 50 or 100 or as agreed →		← 50 or 100 or as agreed →		IS 1954
iii)	Roll width, m, <i>Min</i>	← 2.0 or 5.0 or as agreed →		← 2.0 or 5.0 or as agreed →		← 2.0 or 5.0 or as agreed →		IS 1954
iv)	Grab strength, N, <i>Min</i>	1 400	900	1 100	700	800	500	IS 16342
v)	Sewn seam, strenth, N, <i>Min</i> (see Note 1)	1 200	810	990	630	720	450	IS 15060
vi)	Trapezoidal tear strenth, N, <i>Min</i>	500	350	400	250	300	180	IS 14293
vii)	CBR puncture strenth, N, <i>Min</i>	2 800	2 000	2 200	1 400	1 700	1 000	IS 16078
B Structural Integrity Properties:								
i)	Permittivity, s ⁻¹ , <i>Min</i>	0.05	0.05	0.05	0.05	0.05	0.05	IS 14324
ii)	Apparent opening size (AOS), mm, <i>Max</i>	0.43	0.43	0.43	0.43	0.43	0.43	IS 14294
C Durability Properties:								
i)	Resistance to installation damage, percent retained strength, SC/SW/GP (see Note 2), <i>Min</i>	← 95/93/90 →		← 95/93/90 →		← 95/93/90 →		IS 17420

Price Group 1

Amendment No. 1 to IS 16362 : 2020

Sl No.	Characteristic(s)	Requirements						Method of Test, Ref to
		Class 1		Class 2		Class 3		
		Elongation < 50 percent	Elongation ≥ 50 percent	Elongation < 50 percent	Elongation ≥ 50 percent	Elongation < 50 percent	Elongation ≥ 50 percent	
		(3)	(4)	(5)	(6)	(7)	(8)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ii)	Ultraviolet stability at 500 h, retained strength, percent of original strength, <i>Min</i>	70	70	70	70	70	70	IS 13162 (Part 2)

NOTES

1 The parameter shall be tested, when product is supplied with seam. Refer to IS 16345 for stitch and overlap seam requirements.

2 Resistance to installation damage (loss of load capacity or structural integrity) when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW) and crushed stone classified as poorly graded gravel (GP).

3 Class 2 or Class 3 geotextile may be specified in view of the sufficient survivability based on field experience, laboratory testing and visual inspection of a geotextile sample removed from a field test section.

4 Permittivity and permeability of geotextile should be greater than that of the soil.

5 For Class 2, the required MARV tear strength for woven monofilament geotextiles shall be 250 N.

6 For durability tests having a range of products identical except for mass per area, it is sufficient to subject only the product of lowest class of each construction type and each elongation category to the test. The results of the test may be applied for the other products in the range, unless they have been tested separately. On the basis of serviceability and performance parameters, the order of the class will be Class 1 > Class 2 > Class 3.

(Page 5, Annex A) — Substitute the following for 13321 (Part 1) : 1992:

IS No.	Title
IS 13321 (Part 1) : 2022/ ISO 10318-1 : 2015	Geosynthetics: Part 1 Terms and definitions (<i>first revision</i>)

(Page 5, Annex A) — Insert the following new entries at the end:

IS No.	Title
IS 16345 : 2020	Geosynthetics — Guidelines for installation of geotextile used in subgrade separation in pavement structures (<i>first revision</i>)
IS 17420 : 2020/ ISO 10722 : 2019	Geosynthetics — Index test procedure for the evaluation of mechanical damage under repeated loading — Damage caused by granular materials (laboratory test method)